

IN THE CLAIMS:

Please cancel Claims 1-10 and add new claims 11-25, as follows:

AMENDMENTS TO THE CLAIMS:

1-10 (canceled)

11. (New) A linear compressor unit, comprising:
an electromagnetic alternating field surrounding at least a portion of a cylinder;
a magnet located in said electromagnetic alternating field in said cylinder, said magnet displaceable back and forth in said electromagnetic alternating field;
a piston located in said electromagnetic alternating field in said cylinder drivingly connected to said magnet;
a buffer volume;
a module casing which encloses said cylinder and said buffer volume;
said cylinder mounted in said module casing so that said cylinder can oscillate in said module casing;
said module casing including an inlet passage for the medium to be compressed;
said cylinder including an inlet opening lying opposite said inlet passage without making contact therewith;
a passage to said buffer volume formed between said inlet opening and said inlet passage; and
at least one sound restrictor element located in said buffer volume passage.
12. (New) The linear compressor unit according to claim 11, including said sound restrictor element having a pair of intermeshing walls, a first set of walls attached to said module casing and a second set of walls attached to said cylinder.

13. (New) The linear compressor unit according to claim 12, including said intermeshing walls are formed in a ring shape and surround at least one of said inlet opening and said inlet passage.
14. (New) The linear compressor unit according to claim 11, including said cylinder including a chamber for receiving said piston and at least one sound-dampening chamber through which said medium to be compressed flows, said sound-dampening chamber arranged between said inlet opening of said chamber and said piston chamber.
15. (New) The linear compressor unit according to claim 11, including at least one sound-dampening chamber through which said medium to be compressed flows located in said inlet passage of said module casing.
16. (New) The linear compressor unit according to claim 15, including said sound-dampening chamber is formed in a flat-cylindrical shape with a cylindrical axis opening and said inlet passage of said module casing is substantially aligned therewith.
17. (New) The linear compressor unit according to claim 11, said cylinder mounted for oscillation in said module casing by an cylinder outlet pipe.
18. (New) The linear compressor unit according to claim 17, including said outlet pipe is formed helically around said cylinder.

19. (New) The linear compressor unit according to claim 11, including said magnet is formed as an axial extension of said piston.

20. (New) The linear compressor unit according to claim 11, including said magnet is formed as a ring shaped body at least partially surrounding said piston and connected thereto at one end of said piston.

21. (New) A linear compressor unit, comprising:
an electromagnetic alternating field surrounding at least a portion of a cylinder;

a magnet located in said electromagnetic alternating field in said cylinder, said magnet displaceable back and forth in said electromagnetic alternating field;

a piston located in said electromagnetic alternating field in said cylinder drivingly connected to said magnet;

a buffer volume;

a module casing which encloses said cylinder and said buffer volume;

said cylinder mounted in said module casing so that said cylinder can oscillate in said module casing;

said module casing including an inlet passage for the medium to be compressed and a sound-dampening chamber through which said medium to be compressed flows located in said inlet passage;

said cylinder including an inlet opening lying opposite said inlet passage without making contact therewith, said cylinder including a chamber for receiving said piston and a sound-dampening chamber through which said medium to be compressed flows, said sound-dampening chamber arranged

between said inlet opening of said chamber and said piston chamber;

a passage to said buffer volume formed between said inlet opening and said inlet passage; and

at least one sound restrictor element located in said buffer volume passage, said sound restrictor element having a pair of intermeshing walls, a first set of walls attached to said module casing and a second set of walls attached to said cylinder, said intermeshing walls are formed in a ring shape and surround at least one of said inlet opening and said inlet passage.

22. (New) The linear compressor unit according to claim 21, including said sound-dampening chamber is formed in a flat-cylindrical shape with a cylindrical axis opening and said inlet passage of said module casing is substantially aligned therewith.

23. (New) The linear compressor unit according to claim 11, said cylinder mounted for oscillation in said module casing by an cylinder outlet pipe formed helically around said cylinder.

24. (New) The linear compressor unit according to claim 21, including said magnet is formed as an axial extension of said piston.

25. (New) The linear compressor unit according to claim 21, including said magnet is formed as a ring shaped body at least partially surrounding said piston and connected thereto at one end of said piston.